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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/083,226

02/25/2002

Kouji Uno

SIC-01-014

4634

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7590

11/06/2003

DELAND LAW OFFICE

P.O. BOX 69

KLAMATH RIVER, CA 96050-0069

EXAMINER

DINH, TRINH VO

ART UNIT

PAPER NUMBER

2821

DATE MAILED: 11/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/083,226

Applicant(s)

UNO, KOUJI

Examiner

Trinh Vo Dinh

Art Unit

2821

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 08/05/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☒ Claim(s) 16 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Applicant's amendment filed on 08/05/2003 has been carefully considered by the examiner. The arguments advanced therein are persuasive with respect to the rejections of record, and those rejections are accordingly withdrawn. In view of a further consideration, however, a new rejection is set forth below. This action is not final.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5, 7, 10-11 and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Dunch (WO 81/01349).

With respect to claims 1, 7, 10-11, Dunch discloses a bicycle charge control circuit comprising a lamp switch (3, 13) for selectively providing power from the dynamo (the Figure, abstract) to a lamp (4, 5), a battery capacitor (7) charged by the dynamo, and a lamp control circuit (1-16) operatively coupled to the lamp switch and to the battery to control the lamp switch to intermittently supply power when the battery voltage below a selected value (abstract or col. 2, line 32 to col. 4, line 13). Dunch, furthermore, discloses the lamp control circuit comprising a first capacitor (12), a first diode (11) coupled for communicating power from the dynamo (1) to the first capacitor during one half cycle, a second capacitor (9) and a second diode (6) coupled for communicating power from the dynamo to the second capacitor

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during the other half cycle (the Figure, or col. 3, line 25 to col. 4, line 13), and the battery comprising a battery capacitor or the third capacitor (7).

With respect to claims 2-3, Dunch discloses the circuit comprising a rectifier (6, 11) that rectifies power from the dynamo to the battery.

With respect to claims 4-5, Dunch furthermore discloses a charging switch (13) for selectively providing power from the dynamo to the battery, and control circuit (10-16) controlling the operative of the charging switch (col. 5, lines 50+), wherein a voltage from at least one of the first and the second capacitors is applied to a control terminal of the charging transistor (13).

With respect to claim 12, Dunch discloses a first transistor (13) for selectively providing power from the dynamo to the battery, wherein voltage from at least one of the first and second capacitors (9, 12) is applied to a control terminal of the first transistor (the Figure).

3. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Jenny (DE 4,429,693 A1) submitted by Applicant.

With respect to claims 1, 7 and 10-11, Jenny discloses a bicycle charge control circuit comprising a first lamp switch (S, T1-T7) for selectively providing power from the dynamo (the Fig. 1, abstract) to a lamp (L1, L2), a battery (A) charged by the dynamo, and a lamp control circuit (Fig. 1, abstract) operatively coupled to the lamp switch and to the battery to control the lamp switch to intermittently supply power when the battery voltage below a selected value (abstract) wherein the lamp control circuit comprises a first capacitor (C1, C2), a first diode (D1, D2, D3) coupled for communicating power from the dynamo to the first

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capacitor during one of a half-cycle of the dynamo, a second capacitor (C1, C2), and a second diode (D1, D2, D3) coupled for communicating power from the dynamo to the second capacitor during the other one of the half-cycle of the dynamo as well as current from the first capacitor (Fig. 1), and the battery comprise a battery capacitor or a third capacitor (A).

With respect to claims 2-3, Jenny discloses the circuit comprising a rectifier (C1, C2, D1, D2, D3) that rectifies power from the dynamo to the battery.

With respect to claims 4-6, Jenny, furthermore, discloses a charging transistor (T3) for selectively providing power from the dynamo to the battery, and a charging switch control circuit (abstract, Fig. 1) controlling the operation of the charging switch (Abstract) wherein a voltage from at least one of the first and second capacitors (C1, C2) is applied to the charging transistor (T3).

With respect to claim 8, Jenny discloses the first lamp switch (S, T1-T7) comprising a first lamp transistor (T1-T7).

With respect to claim 9, Jenny discloses a second lamp transistor (T3) connected in series with the first lamp transistor (T4).

With respect to claims 12-14, Jenny discloses a first transistor (T3) for selectively providing power from the dynamo to the battery, wherein a voltage from at least one of the first and second capacitors (C1, C2) is applied to control terminal of the first transistor (T3), and a second transistor (T6) having a control terminal coupled for receiving a voltage from the second capacitor (C2), a third transistor (T7) coupled in series with the second transistor, wherein the third transistor has a terminal coupled to the lamp control circuit (Fig. 1).

With respect to claim 15, Jenny discloses a third diode (D1) for rectifying power from the dynamo to the battery.

4. Claims 1, 7 and 10-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Skinner (GB 2,126,438 A) submitted by Applicant.

Skinner discloses a bicycle charge control circuit comprising a first lamp switch (11-14) for selectively providing power from the dynamo (10, Fig. 2) to the lamp (16, 17), a battery (15) charged by the dynamo, and a lamp control circuit (11-14) operatively coupled to the lamp switch and to the battery to control the lamp switch to intermittently supply power when the battery voltage below a selected value (abstract or col. 1, lines 38+) wherein the lamp control circuit comprises a first capacitor (C1, C2), a first diode (D2, D3) coupled for communicating power from the dynamo to the first capacitor during one of a half-cycle of the dynamo, a second capacitor (C1, C2), and a second diode (D2, D3) coupled for communicating power from the dynamo to the second capacitor during the other one of the half-cycle of the dynamo as well as current, and the battery comprise a battery capacitor or a third capacitor (15).

Allowable Subject Matter

5. Claims 16-17 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, and to overcome the objection set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

6. The cited art of record fails to teach the battery comprising a fourth diode coupled in parallel with the third transistor for allowing current flow to the lamp during one of the half cycle of the dynamo.

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Inquiry

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trinh Vo Dinh whose telephone number is (703) 305-4525.

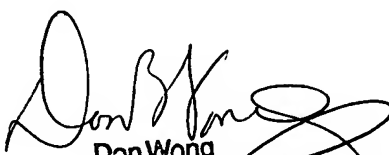
The examiner can normally be reached on Monday-Friday from 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong, can be reached on (703) 308-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-308-7722.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

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Trinh Vo Dinh
October 20, 2003


Don Wong
Supervisory Patent Examiner
Technology Center 2800